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APPLICATION NO. F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/626,457 07/23/2003		Venkata A. Bhagavatula	SP02-165	2551
22928 7590	07/13/2005		EXAMINER	
CORNING INCORPORATED SP-TI-3-1			KALIVODA, CHRISTOPHER M	
CORNING, NY 14831			ART UNIT	PAPER NUMBER
			2883	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		\mathcal{A}				
	Application No.	Applicant(s)				
Office Action Server	10/626,457	BHAGAVATULA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Christopher M. Kalivoda	2883				
The MAILING DATE of this communication appe Period for Reply	ars on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply v. If NO period for reply is specified above, the maximum statutory period will. Failure to reply within the set or extended period for reply will, by statute, or Any reply received by the Office later than three months after the mailing of earned patent term adjustment. See 37 CFR 1.704(b).	i(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days I apply and will expire SIX (6) MONTHS from wause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>26 Apr</u>	, <u>ril 2005</u> .					
2a) ☐ This action is FINAL . 2b) ☒ This a						
3) Since this application is in condition for allowand	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims		•				
4) ⊠ Claim(s) 20-39 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 20-39 is/are rejected. 7) ⊠ Claim(s) 33-39 is/are objected to. 8) □ Claim(s) are subject to restriction and/or	n from consideration.					
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>7/23/2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the d	* ' '					
Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Exa	• •					
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign p a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list of	have been received. have been received in Applicati ty documents have been receive (PCT Rule 17.2(a)).	ion No ed in this National Stage				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)					
Notice of Draftsperson's Patent Drawing Review (PTO-946) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date S. Patent and Trademark Office		Patent Application (PTO-152)				

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DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 20-39 have been considered but are most in view of the new ground(s) of rejection.

Claim Objections

Claims 33-39 are objected to because of the following informalities:

There are two claims numbered 33 (bottom of page 4 and top of page 5).

Accordingly each claim/claim dependency after claim 33 should be renumbered. The claims will be addressed as claimed only claim 33 will be addressed as claim 33 (on page 4) and claim 33 (on page 5) to distinguish.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 20-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jenner et al., U. S. Patent 6,385,382.

Regarding independent claims 20 and 28, Jenner et al. teach a method for passively aligning and an apparatus for aligning optical elements comprising:

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Aligning and securing (col 3, lines 28-30 and col 4, lines 5-7 since the fiber is bonded to the base) one or more optical elements (Fig 1, ref sign 104) to bases (Fig 1); and securing and passively aligning (col 3, lines 39-42 and Fig 1, ref sign 116) one or more of the bases to a substrate (Fig 1, ref sign 10); each base has a first receiving structure (Fig 1, ref sign 112) configured to secure an optical element to the base as described above; and the substrate has one or more second receiving structures at predetermined locations configured to secure and passively align one or more of the bases to the substrate (col 3, lines 39-42).

In this reference, the base is interpreted to be the structure the fiber is mounted/bonded into and the substrate is the optical bench the base is mounted to. In addition, <u>passive alignment</u> occurs because of the alignment features (Fig 1, ref sign 116) in the base mating with oppositely gendered alignment features in the bench as referenced above. As seen best in Figure 5, the shape of the alignment features lends itself to securing the base to the substrate.

Regarding independent claim 38, Jenner et al. teach a method of passively aligning and an optical device comprising:

An optical element (Fig 1, ref sign 104);

A base (Fig 1) having a first receiving structure (Fig 1, ref sign 112) configured to secure the optical element to the base (col 3, lines 28-30, col 4, lines 5-7) and a substrate (Fig 1, ref sign 10) having a second receiving structure at predetermined locations configured to secure and passively align the base to the substrate (col 3, lines 39-42).

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However, the reference is silent with respect to plural optical elements, plural bases and a plurality of second receiving structures.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a plurality of optical elements, bases and a plurality of second receiving structures since it has been upheld that mere duplication of the essential working parts in a device involves only routine skill in the art (St Regis Paper v Bemis Co., 193 USPQ 8.).

The motivation for including a plurality of optical elements, bases and second receiving structure is to provide for system redundancy or to simultaneously align more than one set of components.

Regarding claim 21, each base is passively aligned and secured to the substrate by a receiving structure as referenced above.

Regarding claims 22 and 31, the optical element is secured to the respective base by flexible gripping elements having a pair of spaced sidewalls defining a channel for receiving the optical element (Fig 1, ref sign 112).

Regarding claim 23 and 32, the receiving structure includes flexible gripping elements having a pair of spaced sidewalls defining a channel for receiving the base (Fig 5 - since the receiving structure fits into the alignment elements 116 of the base). The channel would be the space between the opposite-gendered receiving structures.

Regarding claims 24-25, 27, 36 and 37, each base is sized and shaped to cooperate with the receiving gripping element to secure the base to the substrate (col 3,

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lines 39-41). The bases are sized and shaped to be interchangeable and the receiving structure and bases have predetermined and standardized sizes since they are designed to fit together as described above.

Regarding claims 26 and 35, the receiving structure includes a depression or recess in the substrate that receives at least a portion of the base in position on the substrate since a channel is formed as described above.

Regarding claim 29, the first receiving structure secures the optical element to the base at a predetermined spatial and angular position since the fiber is bonded to the base as described above.

Regarding claim 30, the first receiving structure aligns the optical element to the base (Fig 1, ref sign 112 since the fiber fits in the groove).

Regarding claim 33 (page 4), the sidewalls include upper and lower portions and spacing between the upper portions is less than the spacing between the lower portions (col 4, lines 54-65 since the base is squeezed).

Regarding claims 33 (page 5) and 34, the base includes an alignment feature (Fig 1, ref sign 116), which cooperates with an alignment feature on the second receiving structure thereby securing the base to the substrate. The alignment feature includes a groove (Fig 5, slots at bottom of base).

Regarding claim 39, the optical element can be selected form the group consisting of optical fibers, lensed fibers, prisms, filters, thin film filters, switching elements, lenses, graded index lenses, gratings, mirrors, MEMs mirrors,

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electroholographic switches, VCEL arrays, variable optical attenuation elements,

tunable filters and LCD switches (Fig 1, ref sign 104 where 104 is a fiber).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Christopher M. Kalivoda whose telephone number is

(571) 272-2476. The examiner can normally be reached on Monday - Friday (8:30 -

5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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Cmk

07/03/05

Frank G. Font Supervisory Patent Examiner

Frank & Font

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